



PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT (PCT Article 36 and Rule 70)

Applicant's or agent's file reference 13579WO15212		FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA416)	
International application No. PCT/IL 03/00585	International filing date (day/month/year) 15.07.2003	Priority date (day/month/year) 15.07.2002	
International Patent Classification (IPC) or both national classification and IPC G08B13/196			
Applicant MAGNA B.S.P. LTD. ET AL.			
<p>1. This International preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of 11 sheets.</p>			
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the opinion</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input checked="" type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>			
Date of submission of the demand 10.02.2004		Date of completion of this report 24.01.2005	
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016		Authorized Officer De la Cruz Valera, D Telephone No. +31 70 340-4541 	

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/IL 03/00585**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-38 as originally filed

Claims, Numbers

1-37 received on 15.09.2004 with letter of 13.09.2004

Drawings, Sheets

1/12-12/12 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application,

☒ claims Nos. 27

because:

☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (specify):

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☒ no international search report has been established for the said claims Nos. 27

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the Standard.

☐ the computer readable form has not been furnished or does not comply with the Standard.

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-26 28-37
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-26 28-37
Industrial applicability (IA)	Yes: Claims	1-26 28-37
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1.1. Reference is made to the following documents:

- D1: EP-A-1 170 715 (H A N D GMBH) 9 January 2002 (2002-01-09)**
- D2: DE 197 09 799 A (BOSCH GMBH ROBERT) 17 September 1998 (1998-09-17)**
- D3: US-A-5 790 183 (KERBYSON GERALD M) 4 August 1998 (1998-08-04)**
- D4: DE 198 09 210 A (SIEMENS AG) 16 September 1999 (1999-09-16)**
- D5: JP-A-2000 059796 (INOUE SHUJI ET AL) 25 February 2000 (2000-02-25)(interpreted after US-B-6 512 5371, published 28 January 2003 (2003-01-28))**
- D6: US-A-5 862 508 (MIYATAKE TAKAFUMI ET AL) 19 January 1999 (1999-01-19)**

1.2. The present application does not meet the criteria of the PCT, because the subject-matter of claim 1 is not clear in the sense of Article 6 PCT.

In the amended claim as on file, the coexistence of an option "OR" in the pairs of optical OR thermal imagers, is not consistent with point d) of the method claimed, where it is clearly necessary to provide both types of data. This option included in the claim is not possible, and makes its scope unclear.

1.3. Even interpreting only the possibility of the system featuring both thermal and optical imagers as claimed, and seeking to give an opinion on the only possible clarified interpretation of the claim, its subject matter would lack the required inventive step (Art. 33(3) PCT)

The document **D1** discloses (the references in parentheses applying to this document) a method for the monitoring of an environment, comprising the steps of:

a) defining and storing in a memory programs for processing, in real-time, data obtained from the observation of objects by one or more pairs of optical and/or thermal imagers (Par. 0034; See comment above, clarity, and below concerning thermal imaging), relatively positioned along a common vertical line, for identifying said objects and determining whether they are dangerous;(Col. 2, lines 20-34);

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c) determining and storing parameters according to which the observation of the controlled space is effected (Col. 2, lines 41-44; Col. 2, lines 49-54; Col. 4, lines 5-32);

d) carrying out photographic observation of the controlled space or sections thereof according to the aforesaid observation parameters (Col. 2, lines 7-20); and

e) Jointly processing the digital data representing said optical and thermal photographs(par. 0034; see clarity above, as well as comment below with regard to the presence of thermal imaging), to determine whether possible dangerous objects have been detected, and if so, classifying said objects according to the stored danger parameters (Col. 6, lines 15-26).

- The term "processing in real time" is deprived from a precise technical content which can be opposed to "using a bank of scenarios" as in D1. A system can use a bank of scenarios and yet process data in real time as claimed.

- Even in the case of considering only the AND option, the claim should be deemed not inventive, since D2 discloses the attachment of two imagers to a single pole (not being the fact that they are positioned along a common vertical line a feature which can be identified as involving an inventive step over the prior art). On the other hand, the term "videosensor" used in D2 does not exclude thermal imaging. The use of thermal imaging being a normal surveillance option that would be incorporated by the person skilled in the art without exercise of inventive step in a system intended for outdoors day and night (an airport, such as in D1) surveillance, it cannot serve as the basis for the assessment of inventiveness.

The subject matter of claim 1 does not, thus, involve an inventive step (Art. 33(2) PCT).

- 1.3. To claim 28, it also lacks clarity, insofar the term "photographic/thermal" does not reflect unambiguously what type of observation is undertaken (alternative, concurrent, combined, for instance. It has to be noticed also that photographic and thermal are not exclusive concepts). and does not define clearly the claim as required by Art. 6 PCT.

An interpretation of the claim as including thermal and optical imagers would lead to the same conclusion as in claim 1.

Furthermore, independent claim 28 only incorporates to the disclosure of D3 a set of features that represent commonplace characteristics in monitoring apparatuses, corresponding to non connected technical problems (the vertical alignment and

the thermal imaging), where a common inventive concept cannot be identified, and is, for instance anticipated by D3.

The same considerations with regard to the "real time processing" or the "thermal and / or optical imagers" as above apply.

D3 discloses, as far as it can be interpreted, an apparatus for monitoring an environment comprising:

a) One or more pairs of optical and/or thermal imagers (see D3 Col. 6, line 30-48, as well as comment above), relatively positioned along a common vertical line for carrying out photographic/thermal observation of the controlled space or sections thereof (Fig. 4, 111) ;

b) a set of motors for changing the sections of the said photographic observation (Fig. 4, 121);

c) elaborator means for jointly processing the digital data representing said optical and thermal photographs, to determine whether possible dangerous objects have been detected, and if so, classifying said objects according to the stored danger parameters, processing the digital data representing the photographs taken by said photographic devices (Fig. 4, 211; Col. 6, line 30- Col. 7 line 2.),

d) memory means for storing the digital data representing said photographs and the results of said processing (Fig. 4, 221).

The subject matter of claim 28 cannot be regarded as involving an inventive step.